SUCCESS STORY

Better Cows Give More Milk

American volunteers help Kazakhs improve their dairy production.



Khisa Akhmatov (left), director of a central Asian bovine genetic services company, and John Rodgers, a Pennsylvania dairyman, discuss their trip to implant cattle embryos in Eastern Kazakhstan. *Photo: Winrock*

USAID teamed up with the U.S. Department of Agriculture and Winrock to bring American specialists and improve dairy production in Kazakhstan. Countless generations of Kazakhs have devoted themselves to raising dairy cows and other livestock, formerly as nomads and now mostly on farms and ranches on the vast Kazakh steppe. Unfortunately, the traditional breeds of cattle have poor milk productivity compared to breeds in other countries. Because traditional cattle breeding programs take decades to show results, and importing significant numbers of cattle is logistically unfeasible, experts decided to try improving Kazakh milk production by implanting embryos of highly-productive breeds into cows on Kazakh farms. With funding from the U.S. Department of Agriculture and USAID, participants in Winrock's Farmer to Farmer program put 200 cattle embryos on a plane, and flew to Eastern Kazakhstan.

Pennsylvania dairyman John Rodgers, one of the volunteers who transported the embryos, says that he and his colleagues "jumped through a lot of hoops with governmental regulations, but we got them there." The embryos were implanted into cows on eight farms, and 89 calves were delivered as a result - a success rate comparable to that on dairy farms in the U.S., and far better than previous results in Kazakhstan. The "grafted" cows, like grafted fruit trees, are highly productive, like their genetic parents, and hardy, like their surrogate mothers, from whom they gain immunity to local diseases. For example in Almaty region, 23 cows grown from the immigrant embryos give 25 liters of milk per day, while local breeds given the same nutrition and care give only 16 liters per day. Together, Almaty's 23 "grafted" cows brought in an additional \$34,000 during their first lactation period.

The imported embryos is just one of the ways in which USAID-supported volunteers help rural Kazakhs to increase their incomes and better their lives. Rodgers, for example, has also advised Kazakh farmers on other methods to improve the genetic quality of their herds, worked with local families to start agriculture-based businesses, helped several farmers travel to the United States to observe management practices on American dairies, and assisted Kazakh veterinarians in obtaining equipment (including an advanced ultrasound machine) for better care of local livestock. As their productivity and incomes rise, the Kazakh farmers, as Rodgers says, "are thrilled with what's taken place."